



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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September 26, 2000

CERTIFIED RETURN RECEIPT  
Z 230 748 252

William Moeller  
Clifton Mining Company  
70 West Canyon Crest Road, Suite D  
Alpine, Utah 84004

Re: Conditional Tentative Approval, Clifton Mining Company, Cactus Mill, M/045/049,  
Tooele County, Utah

Dear Mr. Moeller:

The Division has completed a final review of your Notice of Intention to Commence Large Mining Operations for your Cactus Millsite, located in Tooele County, Utah, which was received August 24, 2000. After reviewing the information, The Division hereby grants *conditional* tentative approval of the Cactus Mill large mining permit application. We will not be able to publish a formal notice of tentative approval until the conditions are addressed. Once we receive an adequate response to these conditions, we will proceed to publish a formal notice of tentative approval in the appropriate Tooele and Salt Lake County newspapers. This will begin the required 30-day public comment period. If no substantive comments are received during the public comment period, we will then be prepared to issue final approval for this project after the required reclamation surety and Reclamation Contract documents are received.

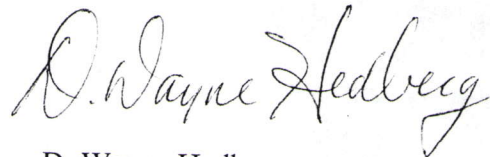
The conditions are listed under the applicable Minerals Rule heading in the attached document. Please format your response in a similar fashion. A draft copy of our reclamation surety cost estimate and a Reclamation Contract (Form MR-RC) are attached. Please let us know what form of surety you wish to post so that we can send you the required forms. If necessary, we will make necessary adjustments to the draft cost estimate once we receive the information tied to this conditional approval. The final surety amount must be received by the end of the 30-day public comment period. Please provide the required information to address these conditions within 60 days of your receipt of this letter.

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Bill Moeller  
M/045/049  
September 26, 2000

If you have any questions in this regard please contact me, Tom Munson, Lynn Kunzler, or Doug Jensen of the Minerals Staff. Thank you for your cooperation in completing this permitting action.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg". The signature is written in dark ink and is positioned above the printed name and title.

D. Wayne Hedberg  
Permit Supervisor  
Minerals Regulatory Program

jb  
Attachment: Conditions, Form MR-RC & Reclamation cost estimate  
m45-49-cond-apv



## **Conditional Tentative Approval**

**Clifton Mining Company  
Cactus Millsite**

**M/045/049**

### **R647-4-106 - Operation Plan**

Clifton Mining Company requested that the Division assist in obtaining the soils and vegetation data. It is not possible for us to complete this task given our current work load. We can assist you with laboratory contacts and/or the names of possible consultants to consider, if you desire.

Identification of the area of the 0.83 acres of hydro-seeding will be necessary for the final reclamation contract. Please indicate where this area is located on the reclamation treatments map.

#### **106.5 Existing soil types, location, amount**

The plan submitted indicates that much of the native soil material was used in the dikes of the ponds. Please provide an estimate of the volume of soil materials within the dikes. Please provide a laboratory analysis of the this soil material as well as any substitute soil material (e.g. tailings) that will be used in reclamation. Each soil material will need to be analyzed for each parameter on the attached list. (LK)

#### **106.7 Existing vegetation - species and amount**

Please submit a vegetation survey that identifies the plant species and the percent of ground cover that exists (or is presumed to have existed) on the area affected by this operation. Since most of the operational area is already disturbed, this survey should be conducted on a representative undisturbed area located adjacent to the mill site. This survey is required to establish the reclamation success standards and to fine tune the revegetation plan. (LK)

## **Division of Oil, Gas and Mining *Minerals Program***

### **Baseline Soils and Overburden Requirements**

Provide an order 3 soil survey and a soils map which describes and identifies the extent of each soils type within the permit area (it may be possible to obtain this information and map from the Natural Resources Conservation Service, formerly the Soil Conservation Service). The soils map must show the location(s) of any proposed topsoil and overburden (suitable substitute soil materials) stockpiles.

Provide a volume estimate of soil material that can be salvaged and used later for reclamation (please note, even an inch or two of topsoil can greatly improve reclamation success).

A laboratory soil analysis will need to be obtained for each soil type to be disturbed, and for each substitute soil material to be used for reclamation. This analysis is needed to evaluate the suitability of

the soil materials and the need for (and rate of) any soil amendments and/or fertilizers to help ensure revegetation success.

*Recommended Laboratory Analyses*

for each soil type to be disturbed or proposed substitute soil materials

- |                                   |   |
|-----------------------------------|---|
| 1. Texture                        | 8. Alkalinity                               |
| 2. pH                             | 9. Sulfur (acid potential)                  |
| 3. EC (conductivity)              | 10. $\text{CaCO}_3$                         |
| 4. SAR                            | 11. Total nitrogen                          |
| 5. Saturation Percentage          | 12. Nitrate nitrogen                        |
| 6. Percent Organic Matter         | 13. Phosphorus (as $\text{P}_2\text{O}_5$ ) |
| 7. CEC (cation exchange capacity) | 14. Potassium (as $\text{K}_2\text{O}$ )    |

**Note:** each soil sample needs to be about 1-1/2 quarts in volume

Updated January, 2000

**R647-4-113 - Surety**

Soil amendment is calculated at 10 tons/acre of composted manure. This amount will be adjusted if, as a result of soil testing, this level of nutrient will not be required. (DJ)



# RECLAMATION SURETY IMATE

Clifton Mining Company

Cactus Mill

M/045/049

last revision

09/19/00

filename M045-049.WB2

page "estimate D8"

Tooele County

Prepared by Utah State Division of Oil, Gas & Mining

-This estimate uses a D8 size dozer for most earthwork

Note: actual unit costs may vary according to site conditions last unit cost update 2-Aug-2000

-Amount of disturbed area which will receive reclamation treatments = 8.9 acres

-Estimated total disturbed area for this mine = 8.9 acres

Activity	Quantity	Units	\$/unit	\$	Note
Safety gates, signs, etc. (mtls & installation)	1	sum	200	200	(1)
Demolition of buildings & facilities	15000	CF	0.24	3,600	(2)
Debris & equipment removal - trucking	22	trips	50	1,100	(3)
Debris & equipment removal - dump fees	0	ton	55	0	(4)
Debris & equipment removal - loading trucks w/FE loader	24	hours	166	3,984	(5)
Demolition & debris removal - general labor	112	hours	15	1,680	(6)
Regrading facilities areas (1 ft depth)	1.0	acre	502	502	(7)
Demolish buildings with backhoe	24	hours	150	3,600	
Ripping entire millsite prior to seeding	7.1	acre	234	1,661	(9)
Ripping access roads - dozer	1.8	acre	234	421	(9)
Sidecast mtl replacement on steep roads- trackhoe	900	LF	1.09	981	(11)
Regrade tailings pond	2.47	acre	411	1,015	(10)
Topsoil replacement - dozer	90	CY	0.50	45	(12)
Composted manure (10 ton/acre)	8.9	acre	300	2,670	(00)
Broadcast seeding	8.1	acre	170	1,377	(00)
Hydroseeding	0.8	acre	800	640	(00)
General site cleanup & trash removal	6.4	acre	50	320	(00)
Equipment mobilization	4	equip	1000	4,000	(00)
Reclamation Supervision	5	days	386	1,930	(15)
		Subtotal		29,727	
10% Contingency				2,973	
		Subtotal		\$32,699	
Escalate for 5 years at 3.13% per yr				5,448	
		Total		\$38,147	
				<b>\$38,100</b>	
		Rounded surety amount in yr 2005-\$			
		Average cost per disturbed acre =		\$4,281	

**DRAFT**

**RECLAMATION SURETY ESTIMA****Clifton Mining Company****Cactus Mill****M/045/049****Prepared by Utah State Division of Oil, Gas & Mining**

last revision

09/19/00

filename M045-049.WB2

**Tooele County****last unit cost update****08/02/00****Note**

- (1) DOGM lump sum assumed
- (2) Means Heavy Construction Cost Data 2000, 02220-100-0100, mix of bldg. types, avg., excluding dump fees
- (3) Means 2000, 02225-730-5100, bldg demo, rubbish handling, \$0.50/CY permile for >8CY truck; assumed 100 miles round trip
- (4) Means 2000, 02225-740-0100, dump charges, typical urban city, tipping fees only, bldg construction mtl's
- (5) Rental Rate Blue Book 3Q/00, Cat 988B, 7CY \$85.64hr+\$39.60/hr, & Means 2000, Crew B-10U, loading trucks only\$40.87
- (6) DOGM assumed wage for unskilled general labor
- (7) Means 2000 & Blue Book 3Q/00: Cat D8N, U, mtl 2550 lb/CY, 50 ft push, 1 ft depth
- (8) Means 2000 & Blue Book 3Q/00: Cat D8N, U, mtl 2550 lb/CY, 100 ft push
- (9) Means 2000 & Blue Book 3Q/00: Cat D8N, U, multi shank rippers, speed 1.0 mph
- (10) Means 2000 & Blue Book 3Q/00: Cat D8N, U, mtl 2550 lb/CY, 50 ft push, used avg vol 0.5CY/LF-berm
- (12) Means 2000 & Blue Book 3Q/00: Cat D8N, U, mtl 2550 lb/CY, 100 ft push
- (13) Means 2000 & Blue Book 3Q/00: Cat 627F P-P, mtl 2550 lb/CY, 2,000 ft haul one-way, grade +/- 4%,
- (14) Means 2000 02320-200-2030: earthwork, hauling excavated or borrow material, off highway hauler, 22 CY, 1 mile round trip, no loading inclu
- (00) DOGM general estimate - mulching
- (00) DOGM general estimate - fertilizing
- (00) DOGM general estimate - manure \$16/ton delivered, \$14 ton/acre spreading
- (00) DOGM general estimate - broadcast seeding
- (00) DOGM general estimate - drill seeding
- (00) DOGM general estimate - hydroseeding
- (00) DOGM general estimate - site cleanup & trash removal
- (00) DOGM general estimate - equipment mobilization
- (15) Means 2000, 01300-700-0180, project manager, minimum \$1,930/wk

**DRAFT**